

The species differs greatly from the New World *Apion* known to me by its red color and very long, subcylindrical head; the eye is situated from the front margin of the prothorax at a distance greater than 1.5 times its diameter. Hustache (1931) gives the size range of this species as 3.3 to 4.5 mm. Members of this subgenus are associated with *Rumex*.

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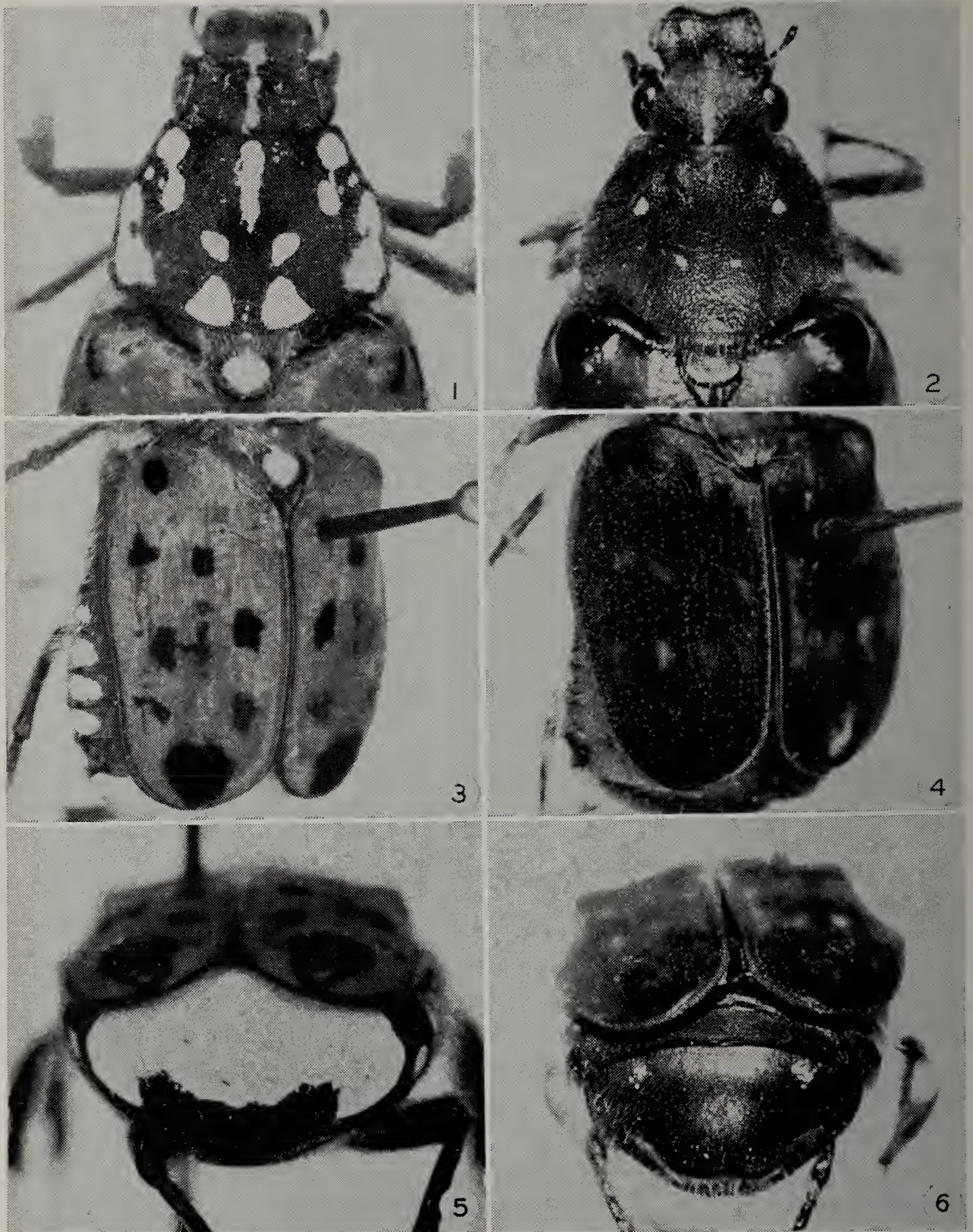
CANADIAN SPECIMENS OF GNORIMELLA MACULOSA (KNOCH) (SCARABAEIDAE) WITH NOTES ON VARIATION

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In The Canadian Field-Naturalist (1957) I published a note on the distribution and occurrence of the scarabaeid *Gnorimella maculosa* (Knoch), generally considered a rare beetle throughout its range in eastern North America. I suggested that this species could be collected rather frequently near Wakefield, Quebec, and on June 8, 1959, I confirmed this prediction. Three females and six males were taken flying around the flowers of *Cornus rugosa* (the same clump of dogwood as in 1956) which occurred on a steep, rocky hillside. Fifteen or more specimens were seen but only nine were taken since they were quite active, owing to the 90° temperature.

Variation in the Wakefield material seems worthy of comment. Published descriptions of the pattern of this beetle refer to a form having black spots on light brown elytra. This seems to be normal for specimens taken

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Variations in the colour pattern of the thorax, elytra, and pygidium of *Gnorimella maculosa*. FIGS. 1, 3, and 5—typical female from Riverton, New Jersey. FIGS. 2, 4, and 6—dark coloured male from Wakefield, Quebec.

in the eastern United States as shown in Figs. 1, 3, and 5. There is no mention in the literature of specimens with dark elytra nor mention of the range of colour variation in the species as a whole. One worker (Schaum, 1849, p. 291) noted the colour difference on the pygidium between the sexes. In the Canadian National Collection there are twenty specimens from the following localities: Wakefield, Quebec (6♂, 5♀), Montreal, Quebec (1♂), Ottawa, Ontario (1♂, 2♀), Walsingham, Ontario (1♀), and Riverton; New Jersey (1♂, 3♀). In these specimens the males have the pronotum (Fig. 2) averaging darker than in the females. The elytra are at least slightly more heavily maculate; most distinctive is the pygidial colour which is normally separated into three light yellow patches in the males (unlike the extreme example illustrated in Fig. 6). Females, on the other hand, have distinct patches of yellow on the pronotum (Fig. 1); the black spots of the elytra (Fig. 3) are generally small and irregular; and the pygidium (Fig. 5) is normally cream coloured or yellow, with the apex black.

While colour will ordinarily serve to separate the sexes, they can be easily distinguished by the difference of the middle tibiae. In the female they are straight while those of the male are more slender and suddenly arcuate.

Colour variation within each sex presents oddly different pictures. All of the male specimens from Canada, particularly those from Wakefield, have the black areas of the elytra noticeably enlarged, the darkest specimen having three, irregular, transverse black bands on the elytra (Fig. 4). Spotting is also reduced or lacking on the pronotum of the Canadian specimens. There is less variation in the females. The black spots of the elytra are larger in the Canadian specimens but the pattern remains similar to the more southern form.

These are the major differences and on the basis of the twenty specimens seen, the darker Canadian forms may indicate a north-south cline in colour, but a much larger number of specimens is needed before this can be definitely established.

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